

On Labels and Issues: The Lysenko Controversy and the Cold War

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The early years of the Cold War were marked by vicious propaganda and counter-propaganda campaigns that thundered on both sides of the Iron Curtain, further dividing the newly formed “Western” and “Eastern” blocs. These campaigns aimed at the consolidation and mobilization of each camp’s politics, economy, ideology, and culture, and at the vilification and demonization of the opposite camp. One of the most notorious among these campaigns – “For Michurinist biology” and “Against Lysenkoism,” as it became known in Eastern and Western blocs respectively – clearly demonstrated that the Cold War drew the dividing line not only on political maps, but also on science.

The centerpiece of the campaign was a session on “the situation in biological science” held in the summer of 1948 by the Lenin All-Union Academy of Agricultural Sciences (VASKhNIL) in Moscow. In his opening address on July 31, the academy’s president Trofim D. Lysenko stated that modern biology had diverged into two opposing trends. Lysenko and his disciples represented one trend, which he named “agrobiology” or “Michurinist biology,” after Ivan Michurin, an amateur plant breeder, who had gained notoriety in the Soviet Union

during the 1930s as a “Russian Luther Burbank.” Western geneticists and a number of their Soviet colleagues represented another trend, which Lysenko called “formal” genetics, or “Mendelism–Morganism–Weismannism.” The latter label, which combined the names of three figures from the history of the study of heredity, reflected a strategy to exploit details from their biographies to criticize genetics and to contrast its “Western” origins with the “native,” Russian roots of Lysenko’s own views.¹ Lysenko declared that for a Soviet scientist the only acceptable position was that of Michurinist biology, and that “bourgeois” Mendelism–Morganism–Weismannism should be banned from the practice of Soviet biologists.

There was nothing surprising in Lysenko’s declarations: he had been condemning “formal” genetics for nearly 15 years.² What came as a surprise, however, was that 3 days later the oracle of the Soviet Communist Party, *Pravda*, published Lysenko’s report in its entirety. Even more surprising were Lysenko’s “concluding remarks” delivered on the last day of the session, August 7, and also duly reprinted by *Pravda*: “The Central Committee of the Communist Party has examined my report and approved it” (Lysenko, 1949, p. 605).

The VASKhNIL meeting inaugurated a massive propaganda campaign “For the undivided rule of Michurinist biology” (Krementsov, 1997). Columns headlined “For progressive Michurinist biology” or “For advanced Soviet science” filled the newspapers, which almost daily published articles by Lysenko’s disciples glorifying their leader and his doctrine. In addition to the *Pravda* publication, Lysenko’s report was immediately issued as a brochure with a print run of 300,000 copies. By the end of August, the entire proceedings of the VASKhNIL session had been printed in 200,000 copies.

During the autumn of 1948, the Michurinist campaign quickly engulfed nearly all Soviet research and educational institutions in every scholarly field. Launched in late August and early September by gatherings in the three largest Soviet academies – the USSR Academy of Sciences, the RSFSR Academy of Pedagogical Sciences, and the USSR

¹ This was pointed out by Conway Zirkle in *Death of a Science Russia*. By referring to the fact that Mendel was a monk, Lysenko and his followers could claim that genetics was a plot by the Catholic church to imply that humans were helpless to alter nature and heredity. Zirkle, 1949, pp. 10–11.

² A bibliography of the Lysenko controversy in the Soviet Union would include hundreds of items ranging from solid monographs to short notes in periodicals. For the most voluminous and detailed studies, see Medvedev, 1969; Joravsky, 1986; Graham, 1974; Lecourt, 1977; Soyfer, 1994; Krementsov, 1997; Roll-Hunsen, 2005. For a brief biography of its main protagonist, see Adams, 1990.

Academy of Medical Sciences – the cascade of meetings “to discuss decisions of the VASKhNIL meeting” swept through all Soviet academies in the Ukraine, Kazakhstan, Uzbekistan, Latvia, Armenia, Azerbaidzhan, Georgia, Estonia, and Belorussia, as well as numerous regional branches and bases of the central academies. State agencies, such as the Ministry of Public Health, the Ministry of Higher Education, the Ministry of Enlightenment, and the Ministry of Agriculture also organized meetings in their subordinate scientific and educational institutions in Moscow, Leningrad, and the capitals of the Soviet Union’s republics. In the course of this massive campaign, certain genetics laboratories were closed, many biologists fired, genetics courses in agricultural schools and universities abolished, and textbooks on “new biology” published. By the end of the year, the “undivided rule of Michurinist biology” had been established and Mendelian genetics had been officially banned in the Soviet Union, resulting in what many Western observers perceived as the “death of genetics” in Russia (Lerner, 1950).

The Michurinist campaign quickly spilled over the borders of the Soviet Union. Lysenko’s address and the entire proceedings of the August VASKhNIL session soon appeared in print not only in the newly-born “people’s democracies,” but also in Afghanistan, Argentina, Austria, Britain, China, Egypt, France, Germany, Iran, Iraq, Japan, Lebanon, Turkey, the United States, and many other countries. The Soviet authorities often funded and always endorsed these publications, while a variety of local actors undertook their translation and dissemination. The Soviets deployed all possible media in the Michurinist campaign. In December 1948, the Soviet film industry produced a new color movie, *Michurin*, chronicling the life and deeds of the “founding father” of Lysenko’s doctrine. Aleksandr Dovzhenko, one of the country’s most famous directors, wrote the screenplay and directed the film; Dmitrii Shostakovich composed the music; Grigorii Belov, one of the most popular actors of that time, played the title role.³ This film was intended not only for domestic audiences: soundtracks for this movie were made in Chinese, Czech, English, French, Hungarian, German, Italian, Korean, and Polish languages. Furthermore, dissatisfied with bad translations and poor pronunciation in the Moscow-made

³ The film had actually been finished before the VASKhNIL meeting and, as result, did not reflect the ultimate victory of Michurinist biology over the pernicious Mendelism–Morganism. Immediately after the VASKhNIL meeting, the film was almost completely recast to correspond to the new reality: Lysenko’s lieutenants Stoletov and Nuzhdin were appointed “scientific consultants” for the new version. See the Russian State Archive for Literature and Art (RGALI), f. 2456, op. 1, d. 1993, ll. 4–5.

soundtracks, the Communist Party's Central Committee ordered that all of them (except the Chinese and Korean) be remade by native speakers.⁴ The film premiered in New York City under the title *Life in Bloom* in May 1949.⁵ One month later, the Central Committee included *Michurin* in the list of Soviet movies to be shown at the international film festival in Czechoslovakia.⁶

As one would have expected, the campaign gained particular momentum in the socialist camp (Krementsov, 2000). In all member-countries, newspapers and magazines published editorials on the VASKhNIL meeting, "advances of Soviet science," and the tasks of local scientists "in light of Michurinist biology." Scientists immediately responded with countless articles, explaining what Michurinist biology was and how it should be practiced. Publications in the local press in Bulgaria, East Germany, Czechoslovakia, Hungary, Poland, and Romania repeated ideological and political denunciations of Mendelian genetics invented by Lysenko, emphasizing its alleged links with fascism and racism, its "practical sterility," and its contradictions to the sacred tenets of Marxism. Numerous meetings to discuss "the advances of Michurinist biology" supplemented the press campaign. Sometimes, local communist party agencies and "societies of friendship with the Soviet Union" organized these meetings. Quite often, various state agencies and scientific institutions spearheaded such gatherings. As in the Soviet Union, Mendelian genetics was condemned, Michurinist biology glorified, and individual biologists forced to comply with the "new genetics."

In the West, the news of the VASKhNIL session and Lysenko's "historical speech" commanded close media attention. The wide campaign in the Eastern bloc was matched by a counter campaign. Major newspapers in practically every country published editorials and reports of their correspondents on the subject. Many newspapers and magazines also published commentaries by leading local biologists and geneticists. To give but one example, from August 13 to December 20, 1948, the *New York Times* carried no fewer than two dozen items on the subject! BBC and the Voice of America broadcasted special programs on Lysenko and his doctrine. Contrary to a positive and even exalted portrayal of Lysenko and his ideas just a decade earlier, during the

⁴ See the Russian State Archive of Socio-Political History (RGASPI), f. 17, op. 118, d. 416, ll. 110–116.

⁵ See "Movie Review...", 1948.

⁶ RGASPI, f. 17, op. 116, d. 437, l. 9.

1930s, now the media waged a militant anti-Lysenko campaign.⁷ The tenor of this campaign was the exact reversal of Lysenko's own condemnations of "Mendelism–Morganism–Weismannism." Just as Lysenko portrayed Mendelian genetics as an "American," "imperialist," "racist," and "fascist" pseudoscience, the Western media presented Michurinist biology (often dubbed "Lysenkoism") as a "Soviet," "Communist," "Marxist," "totalitarian" pseudoscience. As in the East, various interest groups, ranging from the Engels Society to the American Genetics Society, held meetings to discuss Michurinist biology in France, Italy, Belgium, England, Holland, Sweden, and the United States. Societies of the "Friends of Michurin" sprung up in France, Belgium, and Japan. Quite often local Communist organizations spearheaded the meetings, but other political and professional groups, for example, the Federation of Atomic Scientists, also hosted such gatherings.

Unsurprisingly, U.S. government agents and agencies played an important (though not always visible) role in fending off "the Soviet threat." As Soviet agents and agencies actively promoted Michurinist biology beyond the borders of the Soviet Union, so too their U.S. adversaries counteracted the spread of Michurinism not only on their own territory, but also in other countries. In its broadcasts directed to listeners in Europe, Asia, and the Americas, the "Voice of America" spoke more than once in various languages about "issues in genetics." The US government, like its Soviet counterpart, did not limit its actions to mere words. The American administration in Japan actively hindered the establishment of a National Genetics Institute proposed by some Japanese agriculturists specifically for Michurinist studies, while the US administration in Germany sponsored the relocation of biologists from East to West. The CIA funded the notorious Congress for Cultural Freedom, which became a mouthpiece of anti-Lysenko propaganda and regularly attacked Michurinist biology at its meetings. The agency also

⁷ Compare, for instance, two articles, which appeared in the *New York Times*: "Russian 'Burbank' Shuffles Seasons," in November 1932, and "Lysenko Crashes Genetics in Russia," in August 1948. In the 1930s Lysenko's work received generally positive reviews in Western specialized journals, see Fuller, 1936a, b; Wort, 1939; Loehwing, 1939; Murneek, 1937; "Abstracts of Papers . . .," 1936; "Brief Notices," 1937. As Roll-Hunsen (2005) has convincingly argued in his book *The Lysenko Effect*, Lysenko's theories fit in well with current research in plant breeding and physiology during this period (see particularly Chaps. 5 and 6). Yet, in the late 1930s, after the cancellation of the Seventh International Genetics Congress in Moscow, a "political" dimension of Lysenko's anti-genetics stance began to dominate Western attitudes towards both the man and his ideas, see Krementsov, 2005.

tried to use the anti-Lysenko sentiments of several US scientists to devise certain “actions” that “will lessen the effectiveness of the Soviet scientists or which will serve to heighten and increase the mistrust between the Soviet scientific fraternity and senior Soviet political hierarchy.”⁸

While the “Lysenko affair” in the Soviet Union generated quite an extensive historical literature during the Cold War, the pro- and anti-Lysenko campaigns in various countries around the world attracted relatively little attention. Of course, over the years some historians have examined personal struggles, attitudes, and actions of individual scientists, especially those on political left (e.g. J. B. S. Haldane, J. S. Huxley, and J. D. Bernal), during the campaigns (Jones, 1979; Paul, 1983). However most authors have focused on their subject’s reaction to “Lysenkoism,” without analyzing other issues – for instance, resentment of U.S. power and hegemony – which might have motivated them as well. Meanwhile, historical accounts (particularly memoirs) of these campaigns in separate countries almost universally resorted to decidedly simplistic–Cold War inspired–explanations of events as being steered by the “hand of Moscow,” forcing Lysenko’s doctrine upon passive victims of the Soviet regime (particularly its satellites in the Eastern bloc). The “Lysenko affair” was portrayed as a heroic struggle of Western (and occasionally Eastern) “true” science and scientists against the “pseudoscience” espoused by Lysenko (Regelmann, 1980; Buican, 1978; Glass, 1990).

With the end of the Cold War, some scholars have started to explore the “international dimension of the Lysenko controversy” by identifying its major actors, their motives, audiences, goals, means, and actions, as well as intended and unintended outcomes (Krementsov, 1996). They have called for a careful examination of what the opposing labels – “Michurinist biology” and “Lysenkoism” – actually meant to historical actors who used them, as well as for thorough investigations of the Cold War contexts of the controversy. In examining the situation in the socialist camp, some of them have suggested that the pro-Lysenko campaign resulted from converging efforts of various Soviet agents and agencies to “export,” and numerous local agents and agencies to “import,” Michurinist biology, as actors on both sides pursued their

⁸ The quotation comes from a speech by Lawrence H. Hafstad, the Executive Secretary of the Research and Development Board in the Department of Defense (1947–1949) and a leading member of the US Atomic Energy Commission (1949–1955), at a discussion on 10 August 1951 in Washington, DC. The transcript of the discussion is preserved in H. J. Muller’s personal papers, “Lysenkoism: folder 3. Writings and miscellanea.” The Lilly Library, Bloomington, Indiana.

own interests and advanced their own agendas. They have indicated that in each individual country of the Eastern bloc, pre-existing cultural traditions, institutional structures of local scientific communities, particularities of local power struggles, and political engagements of individuals, shaped forms, outcomes, durations, targets, means, and audiences of the campaign, while the Cold War provided overriding political, economic, and ideological contexts for the events (Krementsov, 2000).

During the last decade, this approach found expression in a series of illuminating historical works that have tackled the specifics of the pro/anti-Lysenko campaigns in countries on both sides of the Iron Curtain, including Poland, Italy, Belgium, Britain, China, France, East and West Germany, and the United States (Hoxtermann, 2000; Hagemann, 2002; Harman, 2003; Schandevyl, 2003; Schneider, 2003; deJong-Lambert, 2005, 2009, 2011; Cassata, 2008; Wolfe, 2010). Many scholars felt that the time has come to look beyond the particularities of individual cases to discern certain general patterns and common themes, to develop cohesive analytical and explanatory frameworks, and to take a comparative approach in their analysis and understanding of the global “Lysenko phenomenon.”

Answering the call of the time, William deJong-Lambert, who had conducted extensive studies of the Michurinist campaign in Poland and the anti-Lysenko campaign waged by certain US and British biologists, single-handedly organized an international conference on “Lysenkoism” in December 2009 in New York City. The conference – generously supported by the Harriman Institute at Columbia University, the Research Foundation of the City University of New York, and Bronx Community College, CUNY – brought together some 30 historians from Canada, Czech Republic, Denmark, Germany, Italy, Japan, Mexico, Norway, Russia, and the United States, as well as a large audience from New York’s various universities. For 2 days, it provided a splendid forum for presentations, debates, and informal discussions.⁹

The current volume presents a selection of six contributions to the New York conference. Each of them explores the specifics of the pro/anti-Lysenko campaign in a particular locale and offers a compelling case study, examining the multitude of actors involved, the variety of goals pursued and means deployed, and the plurality of both intended

⁹ The CUNY Media recorded some of the reports at the conference and posted them on YouTube, see, for instance, http://www.youtube.com/user/CUNYMedia?blend=20&ob=5#p/search/7/c8pH_tF5hI.

and unintended outcomes. But taken together the six articles offer something more: a snapshot of what could be deservedly termed a “global” Lysenko controversy.

The articles convincingly demonstrate the sheer size, longevity, and geographical reach of a controversy that spanned several decades and enveloped Europe, Asia, and the Americas. They show that the controversy unfolded simultaneously on several levels, and that the two contrasting labels that came to identify it – Michurinist biology (the “pro” campaign) and Lysenkoism (the “anti” campaign) – had (and still have) multiple meanings, defined and redefined by the actors who used them to suit their own goals and interests. Along with details specific to each individual case, they display a host of similar features the controversy assumed in different locales. Indeed, the articles strongly suggest that all the actors deployed the controversy as a particular *cultural resource* to address a variety of (often the same) issues individuals and groups in different countries faced in the domestic and international arenas.

This resource, understandably, had a particular import for biology. As Audra Wolfe indicates in her contribution, biologists (and geneticists in particular) used the controversy to debate and eventually reach (at least provisionally) a consensus regarding such burning questions of their discipline as the inheritance of the acquired characteristics, cytoplasmic heredity, gene theory, and mechanisms of biological evolution. As some of the articles hint, the controversy also proved highly instrumental in institution building in biological sciences on both sides of the Iron Curtain, especially in war-ridden Europe, but also in Asia and South America.

The articles, however, demonstrate that the controversy reached far beyond genetics and biology. Together with scientists from other fields who eagerly joined in the fray, biologists employed the controversy to discuss the relations of science to the state, industry, ideology, and society writ large. As the three articles detailing the anti-Lysenko campaign in the United States suggest, for many Western scientists, Lysenko became a convenient straw man in heated debates over the exact role that state agents and agencies could and should play in science and over particular forms of state-funded “big” science that had come into being during World War II. These debates revolved around the issues of “freedom of science” and contrasted the two alternative models of “big” science: “totalitarian” (read state-run) embodied by Michurinist biology and “democratic” (read scientists-run) embodied by Mendelian genetics. Indeed, the very term “Lysenkoism” first

appeared in 1945, three years prior to the VASKhNIL meeting, within a wide discussion over the “autonomy of science,” which flared up in Western scientific periodicals in the aftermath of World War II (Kartman, 1945, p. 69). But if the botanist Leo Kartman, who apparently coined the label, had used it as a convenient shorthand for Lysenko’s biological theories,¹⁰ in the post-1948 anti-Lysenko campaign it also came to denote the state’s control over science. US scientists regularly referred to Lysenko’s triumph in the Soviet Union to defend their own independence from the state’s administrative interventions and ideological pressures. As one journalist observed in December 1948 in the *New York Star*:

We, in the USA, can take heed of the tragic lesson inherent in the Lysenko affair. [...] We cannot expect our own science to be either free or fruitful so long as we tolerate the abominable smears on scientists by the House Un-American Activities Committee, the persecutory execution of the President’s loyalty order, the denial of passports to American scientists suspected of leftist thinking, and the alarming spread of thought-control measures in other fields. Let’s keep the fetters of thought-control from paralyzing and degrading our scientists (Deutsch, 1948).

Rena Selya’s article convincingly demonstrates that after 1948, US geneticists routinely portrayed “Lysenkoism” as an attempt to destroy “scientific freedom.” But as an article with the telling title “Lysenkoism in Washington” (Mellett, 1953) suggests, for American scientists the anti-Lysenko campaign served a purpose far larger than exposing the fallacies of the Soviets, forging intra-disciplinary consensus, or boosting the disciplinary standing of genetics. It was waged to educate US officials, scientists, and the public regarding the new relationship between science and the state, which had emerged during the Second World War and was cemented in the Cold War. Indeed, as Wolfe demonstrates in her article, the controversy provided a perfect instrument to shape the public image of genetics and science more generally. One can also suggest that the Lysenko controversy profoundly influenced the lengthy negotiations between scientists and their patrons over the principles of operation of such science-funding agencies as the National Science Foundation, the National Institutes of Health, the National Endowment for the Humanities, the Atomic Energy Commission, and the

¹⁰ L. C. Dunn used the label in the same way in his review of the detailed account of Lysenko’s theories and experiments produced by British botanists P. S. Hudson and R. H. Richens. See Dunn, 1946.

Rockefeller Foundation in the United States, as well as the National Research Council and the Medical Research Council in Britain, during the Cold War era.

But the Lysenko controversy proved influential not only in the debates over the “external” relations of science. As Michael Gordin shows in his article, it also served as a whetstone in impassioned arguments over what science, and by extension, pseudoscience, is. The controversy provided a template for answering a series of critical questions about the nature of science in the second half of the twentieth century: What constitutes appropriate/inappropriate and legitimate/illegitimate scientific practices, in terms of both investigative practices that generate scientific knowledge and social practices that generate careers, patrons, and institutions? What makes an individual a scientist? How should scientific bodies be run and scientific controversies resolved? Could a philosophy – be it Marxist, positivist, or any other – actually direct scientific research?

As the contributions of Audra Wolfe and Rena Selya indicate, answers to these questions forged during the controversy were critical for shaping the individual and group identities – including political affiliations, public responsibilities, and scientific loyalties – of numerous scientists in the United States. Similarly, the case studies presented by Francesco Cassata and William deJong-Lambert demonstrate the decisive role of the Lysenko controversy in the processes of self-identification for scientists in Italy and Poland, respectively. Echoing some earlier studies of the Western “Left,” Cassata’s article convincingly shows that the controversy provided a critical test both for the Italian Communist Party’s dual policy of pursuing an independent “road to socialism,” while retaining its affiliation to the international communist movement and its leader, the Soviet Communist Party, and for Italian biologists’ “dual loyalties” – to their science and to their politics. On the other hand, as deJong-Lambert’s analysis of “Polish Lysenkoism” and Laurence Schneider’s examination of Michurinist biology in China indicate, for government officials and politicians in various countries, the controversy offered an easy way to demonstrate their adherence to a particular side in the Cold War confrontation and to showcase their loyalty, exploiting the economic, military, political, and any other benefits such loyalty could entail in the world polarized by the Cold War.

The articles not only answer some of the old questions about the Lysenko controversy, they also raise new ones, illuminating numerous pathways for future research. At the time of the VASKhNIL

conference, the synthesis of genetics and evolutionary theory was a very recent event and it is notable that both sides accused the other of ‘distorting’ Darwinism. Indeed, in the Eastern bloc, Lysenko’s doctrine was also hailed as “creative Darwinism.”¹¹ This merits further investigation into the ideological value of different theories of heredity.¹² It is also worth considering whether Lysenko’s identification with Lamarckism, and the relentless anti-Lamarckian ridicule this provoked, may have impeded the advancement of approaches to the study of biological evolution, which emphasized the role of the environment such as C. H. Waddington’s epigenetics.¹³

We would certainly benefit from examining the unique constellations of factors inherent to specific locales in Asia, Latin America, and Europe, not covered in the present volume. Several case studies seem of special import in this respect. The break of the Yugoslavian Communists with the Soviet camp in the summer of 1948, exactly during the time of the pro-Lysenko campaign in the East, raises interesting questions. Obviously, Soviet agents and agencies could not “export” Michurinist biology to Yugoslavia. But was it ever “imported” in this country? If so, when, why, and by whom?

The divided Germany offers another valuable case study. There was a noticeable difference between East and West Germany in regard to the Lysenko controversy. The West was largely “against” Lysenko, while the East was largely “pro.” How much of this difference could be attributed to political factors such as the pressure from, and influence of, their respective patrons – the United States and the Soviet Union? How much is explicable by the difference in the patronage and institutional structures of the local genetics (and more generally scientific) communities? And how did the shared past of the German genetic community (particularly, the involvement with Nazi *Rassenhygiene*) play out in East and West responses to the Lysenko controversy?

¹¹ For an overview of the Soviet debates over these issues, see Krementsov, 2010.

¹² For example, during the VASKhNIL meeting I. I. Prezent defended Lysenko by insisting that, just as Lamarck’s ideas had threatened the established order at the time of the French Revolution, Lysenko’s theories posed a threat to “bourgeois capitalism.” See Prezent, 1949. It is also worth comparing entries on Lamarckism, which appeared in the *Encyclopedia Britannica* in 1958 and 1961. In the latter edition, Conway Zirkle listed along with T.H. Morgan (who had died 16 years before) as an author. The dramatic shift to a Cold War, anti-Lysenko tone is obvious. It is also worth pointing out that Morgan, who believed scientists should not engage in political controversies, would almost certainly never have found this revision acceptable, much less have wanted his name attached to it. See “Lamarckism,” 1958, 1961.

¹³ It is worth noting that first Russian translations of Waddington’s works appeared in Lysenko’s mouthpiece, *Agrobiology*.

Another subject that deserves attention is the place of the controversy in superpower competition for influence in the “Third World.” With its proclaimed “practicality” (clearly expressed in its second name “agrobiology”), Michurinist biology generated a considerable following among agricultural scientists the world over. Given the heavy dependence of the economies of Latin American countries on agriculture, they appear natural candidates for extensive “import” of Lysenko’s doctrine. Did such import take place? As the peculiar episode of Latin-American dignitaries invited to and honored at Mendel’s “Golden Jubilee,” described by Wolfe, suggests, some US agents and agencies definitely tried to “influence” Latin American attitudes toward the controversy. Were they successful?

As for other countries in the “developing” world, it is notable that one of the very few occasions when a Western geneticist (Julian Huxley) and a Soviet Lysenkoist (Nikolai Nuzhdin) engaged in direct debate occurred at a session of the Pakistan Association for the Advancement of Science held in Karachi on January 20, 1954.¹⁴ That this confrontation took place the year before the Bandung Conference in Indonesia offers a possibility for considering the Lysenko controversy as an influence on the formation of the Non-Aligned Movement. Spectacles such as the vicious confrontation between the proponents of Michurinist biology and Mendelian genetics may have undermined the authority of “First World” practices and institutions – of which science was very much a part – and been just the sort of thing that made countries in the “Third World” disinclined to align themselves with either side.

Aside from the issue of specifics, the articles raise more general questions about what the Lysenko controversy tells us regarding the interrelations of science and the Cold War. For several decades, studies of the three main disciplines that formed the scientific core of the so-called academic-military-industrial complex – physics, mathematics, and chemistry – have dominated the history of Cold War science. Historical examinations of the development of nuclear weapons, rockets, computers, and submarines (to mention just a few iconic Cold War projects) have overshadowed studies of developments in fields that had no immediate military applications. Sometimes such disciplines have been viewed as “untouched” by the Cold War and its impact on science and technology. Even a few recent works that deal with biological sciences consider their Cold War history almost exclusively within the framework of their possible military applications and security implications (Rasmussen, 1997, 2002; Creager, 2006).

¹⁴ See Box 4, folder 2. Julian Huxley Papers, Rice University.

The collection of articles presented in this volume shows that the impact of the Cold War on science went far beyond the enhancement of science's military role. The Cold War also gave science an unprecedented symbolic value as a propaganda tool in the competition between the two opposing blocs.¹⁵ In this context, any discipline, regardless of its military value, could and did become a Cold War battlefield, creating strange associations and producing quite unexpected outcomes. For instance, some Western security agencies and science patrons immediately construed any deviation from "orthodox" genetics (not to mention any open support for Michurinist biology) as "a sympathy with Communism." This might well have fueled loyalty investigations (in the case of Salvador Luria described by Selya), impeded the reception of funding,¹⁶ and triggered the relocation of an international genetics congress from the United States to Canada.

The materials presented in the articles clearly indicate that apparent similarities in the forms, and especially functions, of the controversy in so many different countries were to a considerable degree generated by the symbolic value that science acquired in the Cold War context. The Lysenko controversy became a symbol, an instrument, and a focal point of the Cold War confrontation between the two competing blocs to no lesser extent than the arms and space race. Indeed, if the nuclear arms and space race unfolded behind the closely-guarded doors of secret military installations, the Lysenko controversy developed in the open public sphere. Unlike physics or chemistry, which were deeply involved in various military projects of the ongoing Cold War, and hence considered "top-secret," both Mendelian genetics and Michurinist biology could be safely exported to, and imported by, both allies and enemies. One could argue that the "non-military" character of contemporary genetics proved a major factor in making the Lysenko controversy a global phenomenon.

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¹⁵ For elaboration of this argument, see Kremontsov, 2007, 2009.

¹⁶ As was the case with the Rockefeller Foundation's funding for the French geneticist Boris Efrussi, see Krige, 2006.

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